



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

Western Regional Office • 436 Dwight Street, Springfield MA 01103 • 413-784-1100

DEVAL L. PATRICK
Governor

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Secretary

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Commissioner

July 17, 2014

Ms. Rita Marcotte
US Tsubaki Automotive, LLC
106 Lonczak Drive
Chicopee, MA 01022

RE: CHICOPEE
Transmittal No.: X258507
Application No.: WE-14-011
Class: *SM-25*
FMF No.: 282101
AIR QUALITY PLAN APPROVAL

Dear Ms. Marcotte:

The Massachusetts Department of Environmental Protection (“MassDEP”), Bureau of Waste Prevention, has reviewed your Limited Plan Application (“Application”) listed above. This Application concerns the proposed alteration and/or operation of the Chain Assembly and Cleaning Processes at your manufacturing facility located at 106 Lonczak Drive in Chicopee, Massachusetts (“Facility”).

This Application was submitted in accordance with 310 CMR 7.02 Plan Approval and Emission Limitations as contained in 310 CMR 7.00 “Air Pollution Control,” regulations adopted by MassDEP pursuant to the authority granted by Massachusetts General Laws, Chapter 111, Section 142 A-J, Chapter 21C, Section 4 and 6, and Chapter 21E, Section 6. MassDEP’s review of your Application has been limited to air pollution control regulation compliance and does not relieve you of the obligation to comply with any other regulatory requirements.

MassDEP has determined that the Application is administratively and technically complete and that the Application is in conformance with the Air Pollution Control regulations and current air pollution control engineering practice, and hereby grants this **Plan Approval** for said Application, as submitted, subject to the conditions listed below.

Please review the entire Plan Approval, as it stipulates the conditions with which the Facility owner/operator (“Permittee”) must comply in order for the Facility to be operated in compliance with this Plan Approval.

1. DESCRIPTION OF FACILITY AND APPLICATION

U.S. Tsubaki Automotive, LLC (hereinafter “Permittee”), located at 106 Lonczak Drive, in Chicopee is a manufacturing company primarily engaged in the manufacture of drive chains for the automotive industry. Tsubaki utilizes various petroleum based oils and cleaning materials for the purpose of metal parts cleaning and to minimize corrosion of metal in their Chain Assembly and Cleaning Processes. These materials contain Volatile Organic Compounds (“VOCs”).

Each Chain Assembly Machine is a closed system with a 25-gallon reservoir. The reservoir contains Anticorit Process Oil (“Anticorit”), which is used as a rust preventative coating on the chains. Anticorit contains a maximum of 3.78 pounds of VOCs per gallon as applied and no hazardous air pollutants (“HAPs”) according to the material data sheets (“MDS”). Virgin Anticorit is pumped into the reservoir via a feed pump directly from a sealed 55-gallon drum of Anticorit that remains next to the machine until empty. Anticorit is flushed from the reservoir onto the chain in a sealed / covered area of the machine. The sealed area of the machine captures any mist and filters the oil before it flows back into the reservoir.

There are sixteen (16) Chain Assembly Machines in operation at the Tsubaki facility. Chain Assembly Machines 1, 2, 10, 11, and 12 were permitted under NMCPA 1-P-01-057 TR #W019144 (dated 2/25/2002) as “wash machines”. Two other permitted wash machines, 17 & 18, are no longer in use and have been removed from the facility. The remaining Chain Assembly Machines were evaluated for their potential to emit greater than 1 ton of VOC and each Chain Assembly Machine was evaluated based on its installation date. In accordance with 310 CMR 7.00, equipment installed at the same facility, for the same process, with an installation date within one year of each other, must be assessed together as one process for potential VOC emissions and air permitting. Therefore, Chain Assembly Machines 5, 6, and 7 are combined into a single emission unit and identified as EU 01. Chain Assembly Machines 8 and 9 are combined into another emission unit and identified as EU 02.

The facility has four (4) vacuum degreasers that replaced the Safety Kleen cold degreasers permitted as part of NMCPA 1-P-01-057 TR #W019144 (dated 2/25/2002). The vacuum degreasing process consists of a close-looped, stand-alone mechanical parts washing system which uses Daphne Cleaner NH-U to wash oil and grease off the steel parts. The Daphne Cleaner contains 80% VOC by weight or 6.64 pounds VOC per gallon applied. The installation dates of the four vacuum degreasers were 1997, 2000, 2006, and 2011. Each vacuum degreasers potential to emit is below the 1 ton per year threshold.

In addition, Tsubaki uses Lacquer Thinner, Electric Contact Cleaner and LPS Zero Tri throughout the facility in manual parts cleaning applications. Lacquer thinner, which has a VOC content of 100% by weight and 6.61 pounds VOC per gallon applied, is hand applied to manufactured parts, machine surfaces, and tools in all departments at the facility to remove dirt and excess grime to meet cleanliness specifications before shipment. All VOCs from this process are released to the atmosphere. This process is identified as EU 03.

Tsubaki uses Electric Contact Cleaner and LPS Zero Tri, cleaning products that contain no HAPs, in their cleaning process. Electric Contact Cleaner and LPS Zero Tri are hand applied to manufactured parts in the tensioner department to remove excess grease from parts. Electric Contact Cleaner and LPS Zero Tri both contain 6.33 pounds of VOC per gallon applied. Based on the maximum Electric Contact Cleaner and LPS Zero Tri usage of 190 gallons per year (scaling actual usage to 8,760 hours), the air contaminant emissions will not exceed 1.0 tons per year of VOCs.

Tsubaki continues to operate endothermic gas generators, rotary furnaces, reheat furnaces and a belt furnace for the purpose of heat treating metals in various stages within the manufacturing process. The fuel utilization equipment is exempt under 310 CMR 7.02(2)15 since all have maximum energy input below 10 MMBtu/hr utilizing propane as fuel.

Facility-Wide Emission Rates

Tsubaki has requested to establish a facility-wide emission limit of 9.5 tons of VOCs in any 12 month rolling period and 1.0 tons of individual and total HAPs in any 12 month rolling period.

Regulatory Applicability

Best Available Control Technology

Between 2002 and 2004, Tsubaki conducted extensive research for the replacement of RustCheck 203, a rust preventative product with a VOC content of 81.6%. In 2004, Anticorit, a rust preventative product with a VOC content of 53.2% was chosen as a replacement. Tsubaki will continue to investigate lower or non-VOC rust preventative oils, keep covers closed on all containers using VOC containing materials, and adopt material usage restrictions for the Anticorit (5,559 gallons per 12-month rolling), Lacquer Thinner (709 gallons per 12-month rolling), and Electric Contact Cleaner and LPS Zero Tri (190 gallons per 12-month rolling).

Tsubaki proposes the use of a combination of best management practices, pollution prevention and a limitation on the hours of operation and /or raw material usage. Tsubaki will minimize VOC and HAP emissions from their operations by limiting the VOC and HAP contents of coatings/materials, limiting the usage of VOC and HAP-containing coatings/materials and implementing work practices which minimize the evaporation of VOCs and HAPs.

In addition to being subject to the BACT requirements of 310 CMR 7.02(8)(a)2., each Chain Assembly Machine (including cleanup operations) and the associated surface preparation are subject to the visible emission requirements of 310 CMR 7.06, the dust, odor, construction and demolition requirements of 310 CMR 7.09 and the noise reduction requirements of 310 CMR 7.10.

Please be advised that this FINAL APPROVAL replaces in full Approval NMCPA 1-P-01-057 TR #W019144 (dated 2/25/2002) and all previous approvals for the MassDEP regulated air pollution sources at US Tsubaki Automotive, LLC.

2. EMISSION UNIT (EU) IDENTIFICATION

Each Emission Unit (EU) identified in Table 1 is subject to and regulated by this Plan Approval:

Table 1			
EU#	Description	Design Capacity	Pollution Control Device (PCD)
1	Chain Assembly Machines 5, 6, &7	Approximately 25 gallons per each Machine	None
2	Chain Assembly Machines 8 & 9		
3	Miscellaneous Solvent use for Clean-Up Operations	N/A	

Table 1 Key:

EU# = Emission Unit Number

PCD = Pollution Control Device

3. APPLICABLE REQUIREMENTS

A. OPERATIONAL, PRODUCTION and EMISSION LIMITS

The Permittee is subject to, and shall not exceed the Operational, Production, and Emission Limits as contained in Table 2 below:

Table 2			
EU#	Operational / Production Limit	Air Contaminant	Emission Limit¹
1	515 Gallons per month/ 3,832 Gal. per 12-month rolling period ²	VOC	1.0 TPM 7.24 TPY ³
2	172 Gallons per month/ 1,727 Gal. per 12-month rolling period ²	VOC	0.33 TPM 3.26 TPY ³

Table 2			
EU#	Operational / Production Limit	Air Contaminant	Emission Limit ¹
3	91 Gal. Lacquer Thinner per Month/ 709 Gal. Lacquer Thinner per 12-month rolling period	VOC	0.3 TPM 2.57 TPY
	25 Gal. Electric Contact Cleaner & LPS Zero Tri per Month/ 190 Gal. Electric Contact Cleaner & LPS Zero Tri per 12-month rolling period.		0.125 TPM 1.0 TPY
Facility-wide	None	Total HAPs	0.125 TPM 1.0 TPY
		Total VOCs	2.0 TPM 9.5 TPY

Table 2 Key:

EU# = Emission Unit Number

Gal. = gallons

VOC = Volatile Organic Compounds

HAP (single) = maximum single Hazardous Air Pollutant

HAPs (total) = total Hazardous Air Pollutants.

TPM = tons per month

TPY = tons per consecutive 12-month period

Table 2 Notes:

¹ = Emission limits expressed as tons per year (TPY) are based on a rolling 12-month total.

² = Based on Anticorit rust preventative coating potential usage only. If at a future date a lower VOC coating is found that can replace Anticorit, Tsubaki shall request an operational limit change from MassDEP prior to any increases in the usage rate.

³ = conservative emission limits based on the assumption that 100 percent of the 3.78 lbs of VOC per gallon is emitted to the atmosphere from the Anticorit process oil.

B. COMPLIANCE DEMONSTRATION

The Permittee is subject to, and shall comply with, the monitoring, testing, record keeping, and reporting requirements as contained in Tables 3, 4, and 5 below:

Table 3	
EU#	Monitoring and Testing Requirements
1 & 2	1. In accordance with 310 CMR 7.18(11)(e), the Permittee shall upon request of MassDEP, perform or have performed tests to demonstrate compliance. Testing shall be conducted in accordance with EPA Method 24 and/or Method 25 as described in 40 CFR Part 60, or by other methods approved by MassDEP or EPA
3	2. The Permittee shall monitor material usage on a monthly basis such that records can be maintained of the Facility's emissions of VOCs and HAPs to determine compliance with the emission limits in Table 2 above.
Facility-wide	3. The Permittee shall establish and maintain a calendar month record of all process oils and degreasing solvents used and the manufacturer's formulation data used for determining VOC content.
	4. If and when MassDEP requires it, the Permittee shall conduct emission testing in accordance with USEPA Reference Test Methods and regulation 310 CMR 7.13

Table 3 Key:

EU# = Emission Unit Number

USEPA = United States Environmental Protection Agency

VOC = Volatile Organic Compound

Table 4	
EU#	Record Keeping Requirements
1, 2, & 3	1. The Permittee shall prepare and maintain daily records sufficient to demonstrate compliance with the limits contained in this Plan Approval. Such records shall include, but are not limited to: <ul style="list-style-type: none"> a. identity, quantity, formulation and density of coating(s) used; b. identity, quantity, formulation and density of any diluent(s) and clean-up solvent(s) used; c. solids content of any coating(s) used;

Table 4	
EU#	Record Keeping Requirements
Facility-wide	2. The Permittee shall maintain adequate records on-site to demonstrate compliance with all operational, production, and emission limits contained in Table 2 above. Records shall also include the actual emissions of air contaminant(s) emitted for each calendar month and for each consecutive twelve month period (current month plus prior eleven months). These records shall be compiled no later than the 15 th day following each month. An electronic version of the MassDEP approved record keeping form, in Microsoft Excel format, can be downloaded at http://www.mass.gov/dep/air/approvals/aqforms.htm#report .
Facility-wide (cont')	3. The Permittee shall maintain records of monitoring and testing as required by Table 3.
	4. The Permittee shall maintain a copy of this Plan Approval, underlying Application and the most up-to-date SOMP for the EU(s) approved herein on-site.
	5. The Permittee shall maintain a record of routine maintenance activities performed on the approved EU(s) and monitoring equipment. The records shall include, at a minimum, the type or a description of the maintenance performed and the date and time the work was completed.
	6. The Permittee shall maintain a record of all malfunctions affecting air contaminant emission rates on the approved EU(s) and monitoring equipment. At a minimum, the records shall include: date and time the malfunction occurred; description of the malfunction; corrective actions taken; the date and time corrective actions were initiated and completed; and the date and time emission rates and monitoring equipment returned to compliant operation.
	7. The Permittee shall maintain records required by this Plan Approval on-site for a minimum of five (5) years.
	8. The Permittee shall make records required by this Plan Approval available to MassDEP and USEPA personnel upon request.

Table 4 Key:

EU# = Emission Unit Number

PCD = Pollution Control Device

SOMP = Standard Operating and Maintenance Procedure

USEPA = United States Environmental Protection Agency

Table 5	
EU#	Reporting Requirements
Facility-wide	1. The Permittee shall submit to MassDEP all information required by this Plan Approval over the signature of a "Responsible Official" as defined in 310 CMR 7.00 and shall include the Certification statement as provided in 310 CMR 7.01(2)(c).

Table 5	
EU#	Reporting Requirements
	2. The Permittee shall notify the Western Regional Office of MassDEP, BWP Permit Chief by telephone (413) 755-2115, email, Marc.Simpson@state.ma.us or fax (413) 784-1149, as soon as possible, but no later than one (1) business day after discovery of an exceedance(s) of Table 2 requirements. A written report shall be submitted to Permit Chief at MassDEP within three (3) business days thereafter and shall include: identification of exceedance(s), duration of exceedance(s), reason for the exceedance(s), corrective actions taken, and action plan to prevent future exceedance(s).
Facility-wide (cont')	3. The Permittee shall submit after the end of each calendar year (by January 31 of each year) the previous twelve (12) monthly reports, in accordance with provisions 1 and 4 of Table 4 of this Approval. At a minimum, the information shall include the calculated facility emissions of VOC and HAP for the month as well as the prior 11 months. An example of a format that is acceptable to MassDEP is the On-Site Record Keeping Form, which can be downloaded at http://www.mass.gov/dep/air/approvals/reshome.htm .
	4. The Permittee shall provide a copy to MassDEP of any record required to be maintained by this Plan Approval within 30-days from MassDEP's request.
	5. The Permittee shall submit to MassDEP for approval a stack emission pretest protocol, at least 30 days prior to emission testing, for emission testing as defined in Table 3 Monitoring and Testing Requirements.
	6. The Permittee shall submit to MassDEP a final stack emission test results report, within 45 days after emission testing, for emission testing as defined in Table 3 Monitoring and Testing Requirements.

Table 5 Key:

EU# = Emission Unit Number

VOC = Volatile Organic Compound

HAP = Hazardous Air Pollutant

4. SPECIAL TERMS AND CONDITIONS

The Permittee is subject to, and shall comply with, the following special terms and conditions:

- A. The Permittee shall comply with the Special Terms and Conditions as contained in Table 6 below:

Table 6	
EU#	Special Terms and Conditions
1 & 2	1. The Permittee shall maintain records of all additions of Anticorit process Oil to the Chain Assembly Machines and each month calculate the VOC emissions from the Chain Assembly Machines.

Table 6	
EU#	Special Terms and Conditions
3	<p>2. The Permittee shall meet the following cleanup solution standards:</p> <ul style="list-style-type: none"> a. cleanup solution shall be kept in covered containers during transport and storage; b. shop towels contaminated with cleanup solution shall be kept, when not in use, in covered containers; and c. Tsubaki shall maintain records of cleanup solution VOC and HAP content and usage to demonstrate compliance with Table 3 requirements of this Approval.
Facility-wide	<p>3. Pursuant to the best available control technology provision of 310 CMR 7.02(8)(a)2, the Permittee shall comply with the following work practices:</p> <ul style="list-style-type: none"> a. Store all VOC and/or HAP-containing materials, process-related waste materials and fresh and spent cleaning solvents in closed containers; b. ensure that mixing and storage containers used for VOC and/or HAP-containing materials and process-related waste materials are kept closed at all times except when depositing or removing these materials; c. minimize spills of VOC and/or HAP-containing materials and process-related waste materials; d. convey VOC and/or HAP-containing materials and process-related waste materials from one location to another in closed containers or pipes; e. minimize VOC and/or HAP emissions from cleaning of application, storage, mixing, and conveying equipment by ensuring that: (i) equipment cleaning is performed without atomizing the cleanup solvent; and, (ii) all spent solvent is captured in closed containers; and f. store and dispose of all absorbent materials, such as cloth or paper, that are contaminated with VOC and/or HAP-containing materials and process-related waste materials in non-absorbent containers that shall be kept closed except when placing materials in or removing materials from the container.
	<p>4. Opacity, exclusive of uncombined water, shall not exceed 10% at all times during all modes of operation, including startups and shutdowns. Visible emissions or opacity which exceeds the limits set forth in this Approval shall be reported to MassDEP in writing or by fax within three (3) business days of the occurrence.</p>
	<p>5. Noise from the facility during routine operation, including startups and shutdowns, shall not exceed MassDEP noise guidelines and shall not cause a condition of air pollution as defined in 310 CMR 7.01 and 7.10.</p>
	<p>6. The facility shall be constructed and operated in a manner to prevent the occurrence of dust and odor conditions which cause or contribute to a condition of air pollution as defined in 310 CMR 7.01 and 7.09.</p>
	<p>7. Any prior Plan Approvals issued under 310 CMR 7.02 shall remain in effect unless specifically changed or superseded by this Plan Approval. The Facility shall not exceed the emission limits and shall comply with approved conditions specified in the prior Plan Approval(s) unless specifically altered by this Plan Approval.</p>

Table 6 Key:
EU# = Emission Unit Number

VOC = Volatile Organic Compound
HAP = Hazardous Air Pollutant

- B. The Permittee shall install and use an exhaust stack, as required in Table 7, on each of the Emission Units that is consistent with good air pollution control engineering practice and that discharges so as to not cause or contribute to a condition of air pollution. Each exhaust stack shall be configured to discharge the gases vertically and shall not be equipped with any part or device that restricts the vertical exhaust flow of the emitted gases, including but not limited to rain protection devices known as “shanty caps” and “egg beaters.” The Permittee shall install and utilize exhaust stacks with the following parameters, as contained in Table 7 below, for the Emission Units that are regulated by this Plan Approval:

Table 7				
EU#	Stack Height Above Ground (feet)	Stack Inside Exit Dimensions (feet)	Stack Gas Exit Velocity Range (feet per second)	Stack Gas Exit Temperature Range (°F)
1	N/A	N/A	N/A	N/A
2	N/A	N/A	N/A	N/A

Table 7 Key:

EU# = Emission Unit Number

°F = Degree Fahrenheit

N/A= Not Applicable

5. GENERAL CONDITIONS

The Permittee is subject to, and shall comply with, the following general conditions:

- A. Pursuant to 310 CMR 7.01, 7.02, 7.09 and 7.10, should any nuisance condition(s), including but not limited to smoke, dust, odor or noise, occur as the result of the operation of the Facility, then the Permittee shall immediately take appropriate steps including shutdown, if necessary, to abate said nuisance condition(s).
- B. If asbestos remediation/removal will occur as a result of the approved construction, reconstruction, or alteration of this Facility, the Permittee shall ensure that all removal/remediation of asbestos shall be done in accordance with 310 CMR 7.15 in its entirety and 310 CMR 4.00.
- C. If construction or demolition of an industrial, commercial or institutional building will occur as a result of the approved construction, reconstruction, or alteration of this Facility, the Permittee shall ensure that said construction or demolition shall be done in accordance with 310 CMR 7.09(2) and 310 CMR 4.00.
- D. Pursuant to 310 CMR 7.01(2)(b) and 7.02(7)(b), the Permittee shall allow MassDEP and / or USEPA personnel access to the Facility, buildings, and all pertinent records for the purpose of making inspections and surveys, collecting samples, obtaining data, and reviewing records.
- E. This Plan Approval does not negate the responsibility of the Permittee to comply with any other applicable Federal, State, or local regulations now or in the future.
- F. Should there be any differences between the Application and this Plan Approval, the Plan Approval shall govern.
- G. Pursuant to 310 CMR 7.02(3)(k), MassDEP may revoke this Plan Approval if the construction work is not commenced within two years from the date of issuance of this Plan Approval, or if the construction work is suspended for one year or more.
- H. This Plan Approval may be suspended, modified, or revoked by MassDEP if MassDEP determines that any condition or part of this Plan Approval is being violated.
- I. This Plan Approval may be modified or amended when in the opinion of MassDEP such is necessary or appropriate to clarify the Plan Approval conditions or after consideration of a written request by the Permittee to amend the Plan Approval conditions.

- J. The Permittee shall conduct emission testing, if requested by MassDEP, in accordance with USEPA Reference Test Methods and regulation 310 CMR 7.13. If required, a pretest protocol report shall be submitted to MassDEP at least 30 days prior to emission testing and the final test results report shall be submitted within 45 days after emission testing.
- K. Pursuant to 310 CMR 7.01(3) and 7.02(3)(f), the Permittee shall comply with all conditions contained in this Plan Approval. Should there be any differences between provisions contained in the General Conditions and provisions contained elsewhere in the Plan Approval, the latter shall govern.

6. MASSACHUSETTS ENVIRONMENTAL POLICY ACT

MassDEP has determined that the filing of an Environmental Notification Form (ENF) with the Secretary of Energy & Environmental Affairs, for air quality control purposes, was not required prior to this action by MassDEP. Notwithstanding this determination, the Massachusetts Environmental Policy Act (MEPA) and 301 CMR 11.00, Section 11.04, provide certain “Fail-Safe Provisions,” which allow the Secretary to require the filing of an ENF and/or an Environmental Impact Report (EIR) at a later time.

7. APPEAL PROCESS

This Plan Approval is an action of MassDEP. If you are aggrieved by this action, you may request an adjudicatory hearing. A request for a hearing must be made in writing and postmarked within twenty-one (21) days of the date of issuance of this Plan Approval.

Under 310 CMR 1.01(6)(b), the request must state clearly and concisely the facts, which are the grounds for the request, and the relief sought. Additionally, the request must state why the Plan Approval is not consistent with applicable laws and regulations.

The hearing request along with a valid check payable to the Commonwealth of Massachusetts in the amount of one hundred dollars (\$100.00) must be mailed to:

Commonwealth of Massachusetts
Department of Environmental Protection
P.O. Box 4062
Boston, MA 02211

This request will be dismissed if the filing fee is not paid, unless the appellant is exempt or granted a waiver as described below. The filing fee is not required if the appellant is a city or town (or municipal agency), county, or district of the Commonwealth of Massachusetts, or a municipal housing authority.

MassDEP may waive the adjudicatory hearing-filing fee for a person who shows that paying the fee will create an undue financial hardship. A person seeking a waiver must file, together with the hearing request as provided above, an affidavit setting forth the facts believed to support the claim of undue financial hardship.

Enclosed is a stamped approved copy of the application submittal.

Should you have any questions concerning this Plan Approval, please contact Todd Wheeler by telephone at (413) 755-2297, or in writing at the letterhead address.

This final document copy is being provided to you electronically by the
Department of Environmental Protection. A signed copy of this document
is on file at the DEP office listed on the letterhead.

Marc Simpson
Permit Chief
Bureau of Waste Prevention

Enclosure

ecc: MassDEP/Boston - Yi Tian
MassDEP/WERO -Roberta Baker
MassDEP/WERO - Peter Czapinski
Tighe & Bond - Jeff Bibeau